CLAIMS

1. Compounds of the formula I

$$(R_1)_j$$
 $(R_2)_j$
 (I)

in which:

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- R₁ represents, independently of each other, a halogen atom; an aliphatic hydrocarbon-based group optionally substituted and/or optionally interrupted by one or more oxygen or sulfur atoms; a nitro group; a cyano group; an amino group; a mono- or dialkylamino group; an alkylcarbonyl group; a carboxyl group; an alkylcarbonylamino group; an alkylsulfonyl group;
- R₂ represents, independently of each other, a cyano group; a hydroxyl group, an alkylcarbonyl group; a carboxyl group; an alkoxycarbonyl group; an unsubstituted amide group; or a linear or branched alkyl group substituted by a cyano, hydroxyl, carboxyl, alkoxycarbonyl or unsubstituted amide group;
- i and j independently being 1 to 5,

with the exclusion of the compound for which i and j = 1 and $R_1 = \text{carboxyl}$ and $R_2 = \text{alkoxycarbonyl}$ or $R_1 = CF_3$ and $R_2 = \text{carboxyl}$; and also the pharmaceutically acceptable derivatives, salts, solvates and stereoisomers thereof, including mixtures thereof in all proportions.

- 2. Compounds according to formula (I) of Claim 1, in which the aliphatic hydrocarbon-based group is a linear or branched C₂-C₁₀ alkyl group optionally substituted by halogen, nitro, cyano, amino, mono- or dialkylamino, carboxyl, acylamino or alkylsulfonyl.
- 3. Compounds according to formula (I) of Claim 1 or 2, in which the halogen is fluorine.

4. Compounds according to formula (I) of one of Claims 1 to 3, in which R_1 represents, independently of each other, -OCH₃, -SCH₃, -OCF₃, -N(CH₃)₂, -COCH₃ or methylsulfonyl.

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5. Compounds of the formula (I) according to one of Claims 1 to 4, in which R₂ represents, independently of each other, cyano, -CH₂OH, -COCH₃, -COOH, -CH₂COOH, -COOCH₃, -COOC₂H₅ or CONH₂.

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- 6. Compounds of the formula (I) according to one of Claims 1 to 5, in which i = 1.
- 7. Compounds of the formula (I) according to one of Claims 1 to 6 in which j = 1.

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- 8. Compounds of the formula (I) according to one of Claims 1 to 7, in which at least one R_1 is in position 3 or 4 on the phenyl ring.
- 9. Compounds of the formula (I) according to one of Claims 1 to 8, in which at least one R₂ is in position 3 or 4 on the phenyl ring.
 - 10. Compounds of the formula (I) according to one of Claims 1 to 9, chosen from the following compounds:
 - 4-[(4-methoxyphenyl)(nitroso)amino]benzoic acid;

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- 4-{nitroso[4-(trifluoromethyl)phenyl]amino}benzoic acid;
- 4-[(4-methoxyphenyl)(nitroso)amino]benzonitrile;
- {4-[(4-methoxyphenyl)(nitroso)amino]phenyl}methanol;
- Ex. 9-29;
- N-nitrosodiphenylamine-4,4'-dicarboxylic acid;

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- 4-{nitroso[4-(trifluoromethoxy)phenyl]amino}benzoic acid;
- 4-[[4-(methylthio)phenyl](nitroso)amino]benzoic acid;
- {4-[(4-chlorophenyl)(nitroso)amino]phenyl}acetic acid;

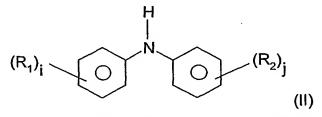
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- {4-[(3-methoxyphenyl)(nitroso)amino]phenyl}acetic acid;
- 4-[[4-(acetylamino)phenyl](nitroso)amino]benzoic acid;
- 4-[(3-cyanophenyl)(nitroso)amino]benzoic acid;
- 4-[[3-(aminocarbonyl)phenyl](nitroso)amino]benzoic acid;
- (4-{nitroso[4-(trifluoromethyl)phenyl]amino}phenyl)acetic acid;
 - {4-[[4-(methylsulfonyl)phenyl](nitroso)amino]phenyl}acetic acid;
 - 4-[(3-chlorophenyl)(nitroso)amino]benzonitrile;
 - 4-{nitroso[4-(trifluoromethoxy)phenyl]amino}benzonitrile;
 - 4-[(4-methoxyphenyl)(nitroso)amino]benzamide;
- 4-[(4-nitrophenyl)(nitroso)amino]benzamide;
 - 4-[(4-fluorophenyl)(nitroso)amino]benzamide;
 - 4-{nitroso[4-(trifluoromethoxy)phenyl]amino}benzamide;
 - '1-{4-[(4-chlorophenyl)(nitroso)amino]phenyl}ethanone;
 - {4-[(4-fluorophenyl)(nitroso)amino]phenyl}methanol;
- (4-{nitroso[4-(trifluoromethoxy)phenyl]amino}phenyl)methanol;
 - N-{4-[[4-(hydroxymethyl)phenyl](nitroso)amino]phenyl}acetamide;
 - {4-[(3-chlorophenyl)(nitroso)amino]phenyl}methanol;
 - {4-[(3-methylphenyl)(nitroso)amino]phenyl}methanol;
 - 3-[(4-fluorophenyl)(nitroso)amino]benzoic acid.

11. Process for the preparation of a compound of the formula (I) according to one of Claims 1 to 10, comprising the reaction of a compound of the formula (II):



in which R_1 , R_2 , i and j are as defined for formula (I) in Claim 1, with a nitrosating agent.

12. Pharmaceutical composition comprising a compound of the formula (I)

$$(R_1)_j$$
 $(R_2)_j$
 (I)

in which:

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- R₁ represents, independently of each other, a halogen atom; an aliphatic hydrocarbon-based group optionally substituted and/or optionally interrupted by one or more oxygen or sulfur atoms; a nitro group; a cyano group; an amino group; a mono- or dialkylamino group; an acylamino group, an alkylcarbonyl group; a carboxyl group; an unsubstituted amide group; an alkylsulfonyl group;
- R₂ represents, independently of each other, a cyano group; a hydroxyl group, an alkylcarbonyl group; a carboxyl group; an alkoxycarbonyl group; an unsubstituted amide group; or a linear or branched alkyl group substituted by a cyano, hydroxyl, carboxyl, alkoxycarbonyl or unsubstituted amide group;
 - i and j independently being 1 to 5,
- with the exclusion of the compound for which i and j = 1 and $R_1 = \text{carboxyl}$ and $R_2 = \text{alkoxycarbonyl}$ or $R_1 = \text{CF}_3$ and $R_2 = \text{carboxyl}$; and also the pharmaceutically acceptable derivatives, salts, solvates and stereo-isomers thereof, including mixtures thereof in all proportions.
- 13. Composition according to Claim 12, in which the aliphatic hydrocarbon-based group is a linear or branched C₂-C₆ alkyl group optionally substituted by halogen, nitro, cyano, amino, mono- or dialkylamino, carboxyl, unsubstituted amide; alkylsulfonyl.
- 25 14. Composition according to Claim 12 or 13, in which the halogen is fluorine.

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- 15. Composition according to either of Claims 13 and 14, in which R_1 represents, independently of each other, -OCH₃, -SCH₃, -OCF₃, -N(CH₃)₂, -COCH₃, methylsulfonyl.
- 16. Composition according to one of Claims 13 to 15, in which R₂ represents, independently of each other, cyano, -CH₂OH, -COCH₃, -COOH, -CH₂COOH, -COOCH₃, -COOC₂H₅ or unsubstituted amide.
 - 17. Composition according to one of Claims 13 to 16, in which i = 1.
 - 18. Composition according to one of Claims 13 to 17, in which j = 1.
 - 19. Composition according to one of Claims 13 to 18, in which at least one R_1 is in position 3 or 4 on the phenyl ring.
 - 20. Composition according to one of Claims 13 to 19, in which at least one R_2 is in position 3 or 4 on the phenyl ring.
- 21. Composition according to one of Claims 13 to 20, in which the compound of the formula (I) is chosen from the following compounds:
 - 4-[(4-methoxyphenyl)(nitroso)amino]benzoic acid;
 - 4-{nitroso[4-(trifluoromethyl)phenyl]amino}benzoic acid;
 - 4-[(4-methoxyphenyl)(nitroso)amino]benzonitrile;
 - {4-[(4-methoxyphenyl)(nitroso)amino]phenyl}methanol;
- ethyl 4-[(4-nitrophenyl)(nitroso)amino]benzoate;
 - ethyl 4-[(4-cyanophenyl)(nitroso)amino]benzoate;
 - ethyl 4-{nitroso[4-(trifluoromethyl)phenyl]amino}benzoate;
 - ethyl 4-[[4-(methylsulfonyl)phenyl](nitroso)amino]benzoate;
 - 4-[(4-nitrophenyl)(nitroso)amino]benzoic acid;
- 4-[(4-cyanophenyl)(nitroso)amino]benzoic acid;
 - 4-[[4-(methylsulfonyl)phenyl](nitroso)amino]benzoic acid;
 - 3-[(4-methoxyphenyl)(nitroso)amino]benzoic acid;

- {4-[(4-methoxyphenyl)(nitroso)amino]phenyl}acetic acid;
- 1-{4-[(4-methoxyphenyl)(nitroso)amino]phenyl}ethanone;
- 4-[(4-fluorophenyl)(nitroso)amino]benzoic acid;
- 4-[(4-acetylphenyl)(nitroso)amino]benzoic acid;
- 5 4-[(3-fluorophenyl)(nitroso)amino]benzoic acid;
 - {4-[(3-fluorophenyl)(nitroso)amino]phenyl}acetic acid;
 - {4-[(4-fluorophenyl)(nitroso)amino]phenyl}acetic acid;
 - 3-[(3-methoxyphenyl)(nitroso)amino]benzoic acid;
 - 4-[(3-methylphenyl)(nitroso)amino]benzoic acid;
- 4-[(3-chlorophenyl)(nitroso)amino]benzoic acid;
 - 3-[(4-acetylphenyl)(nitroso)amino]benzoic acid;
 - 4-[[4-(methylsulfonyl)phenyl](nitroso)amino]benzonitrile;
 - 3-[(4-acetylphenyl)(nitroso)amino]benzonitrile;
 - N-nitrosodiphenylamine-4,4'-dicarboxylic acid;
- 4-{nitroso[4-(trifluoromethoxy)phenyl]amino}benzoic acid;
 - 4-[[4-(methylthio)phenyl](nitroso)amino]benzoic acid;
 - {4-[(4-chlorophenyl)(nitroso)amino]phenyl}acetic acid;
 - {4-[(3-methoxyphenyl)(nitroso)amino]phenyl}acetic acid;
 - 4-[[4-(acetylamino)phenyl](nitroso)amino]benzoic acid;
- 4-[(3-cyanophenyl)(nitroso)amino]benzoic acid;
 - 4-[[3-(aminocarbonyl)phenyl](nitroso)amino]benzoic acid;
 - (4-{nitroso[4-(trifluoromethyl)phenyl]amino}phenyl)acetic acid;
 - {4-[[4-(methylsulfonyl)phenyl](nitroso)amino]phenyl}acetic acid;
 - 4-[(3-chlorophenyl)(nitroso)amino]benzonitrile;
- 4-{nitroso[4-(trifluoromethoxy)phenyl]amino}benzonitrile;
 - 4-[(4-methoxyphenyl)(nitroso)amino]benzamide;
 - 4-[(4-nitrophenyl)(nitroso)amino]benzamide;
 - 4-[(4-fluorophenyl)(nitroso)amino]benzamide;
 - 4-{nitroso[4-(trifluoromethoxy)phenyl]amino}benzamide;
- 30 1-{4-[(4-chlorophenyl)(nitroso)amino]phenyl}ethanone;
 - {4-[(4-fluorophenyl)(nitroso)amino]phenyl}methanol;
 - (4-{nitroso[4-(trifluoromethoxy)phenyl]amino}phenyl)methanol;

- N-{4-[[4-(hydroxymethyl)phenyl](nitroso)amino]phenyl}acetamide;
- {4-[(3-chlorophenyl)(nitroso)amino]phenyl}methanol;
- {4-[(3-methylphenyl)(nitroso)amino]phenyl}methanol;
- 3-[(4-fluorophenyl)(nitroso)amino]benzoic acid.

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22. Use of a compound of the formula (I)

$$(R_1)_i$$
 $(R_2)_j$
 (I)

in which:

- R₁ represents, independently of each other, a halogen atom; an aliphatic hydrocarbon-based group optionally substituted and/or optionally interrupted by one or more oxygen or sulfur atoms; a nitro group; a cyano group; an amino group; a mono- or dialkylamino group; an acylamino group, an alkylcarbonyl group; a carboxyl group; an unsubstituted amide group; an alkylsulfonyl group;
- R₂ represents, independently of each other, a cyano group; a hydroxyl group, an alkylcarbonyl group; a carboxyl group; an alkoxycarbonyl group; an unsubstituted amide group; or a linear or branched alkyl group substituted by a cyano, hydroxyl, carboxyl, alkoxycarbonyl or unsubstituted amide group;
- i and j independently being 1 to 5,
 and also the pharmaceutically acceptable derivatives, salts, solvates and stereoisomers thereof, including mixtures thereof in all proportions.
- 23. Use according to Claim 22, in which the compound of the formula (I) is chosen from the following compounds:
 - 4-[(4-methoxyphenyl)(nitroso)amino]benzoic acid;
 - 4-{nitroso[4-(trifluoromethyl)phenyl]amino}benzoic acid;
 - 4-[(4-methoxyphenyl)(nitroso)amino]benzonitrile;
 - {4-[(4-methoxyphenyl)(nitroso)amino]phenyl}methanol;

- ethyl 4-[(4-nitrophenyl)(nitroso)amino]benzoate;
- ethyl 4-[(4-cyanophenyl)(nitroso)amino]benzoate;
- ethyl 4-{nitroso[4-(trifluoromethyl)phenyl]amino}benzoate;
- ethyl 4-[[4-(methylsulfonyl)phenyl](nitroso)amino]benzoate;
- 5 4-[(4-nitrophenyl)(nitroso)amino]benzoic acid;
 - 4-[(4-cyanophenyl)(nitroso)amino]benzoic acid;
 - 4-[[4-(methylsulfonyl)phenyl](nitroso)amino]benzoic acid;
 - 3-[(4-methoxyphenyl)(nitroso)amino]benzoic acid;
 - {4-[(4-methoxyphenyl)(nitroso)amino]phenyl}acetic acid;
- 10 1-{4-[(4-methoxyphenyl)(nitroso)amino]phenyl}ethanone;
 - 4-[(4-fluorophenyl)(nitroso)amino]benzoic acid;
 - 4-[(4-acetylphenyl)(nitroso)amino]benzoic acid;
 - 4-[(3-fluorophenyl)(nitroso)amino]benzoic acid;
 - {4-[(3-fluorophenyl)(nitroso)amino]phenyl}acetic acid;
- {4-[(4-fluorophenyl)(nitroso)amino]phenyl}acetic acid;
 - 3-[(3-methoxyphenyl)(nitroso)amino]benzoic acid;
 - 4-[(3-methylphenyl)(nitroso)amino]benzoic acid;
 - 4-[(3-chlorophenyl)(nitroso)amino]benzoic acid;
 - 3-[(4-acetylphenyl)(nitroso)amino]benzoic acid;
- 20 4-[[4-(methylsulfonyl)phenyl](nitroso)amino]benzonitrile;
 - 3-[(4-acetylphenyl)(nitroso)amino]benzonitrile;
 - N-nitrosodiphenylamine-4,4'-dicarboxylic acid;
 - 4-{nitroso[4-(trifluoromethoxy)phenyl]amino}benzoic acid;
 - 4-[[4-(methylthio)phenyl](nitroso)amino]benzoic acid;
- 25 {4-[(4-chlorophenyl)(nitroso)amino]phenyl}acetic acid;
 - {4-[(3-methoxyphenyl)(nitroso)amino]phenyl}acetic acid;
 - 4-[[4-(acetylamino)phenyl](nitroso)amino]benzoic acid;
 - 4-[(3-cyanophenyl)(nitroso)amino]benzoic acid;
 - 4-[[3-(aminocarbonyl)phenyl](nitroso)amino]benzoic acid;
- (4-{nitroso[4-(trifluoromethyl)phenyl]amino}phenyl)acetic acid;
 - {4-[[4-(methylsulfonyl)phenyl](nitroso)amino]phenyl}acetic acid;
 - 4-[(3-chlorophenyl)(nitroso)amino]benzonitrile;

- 4-{nitroso[4-(trifluoromethoxy)phenyl]amino}benzonitrile;
- 4-[(4-methoxyphenyl)(nitroso)amino]benzamide;
- 4-[(4-nitrophenyl)(nitroso)amino]benzamide;
- 4-[(4-fluorophenyl)(nitroso)amino]benzamide;
- 5 4-{nitroso[4-(trifluoromethoxy)phenyl]amino}benzamide;
 - 1-{4-[(4-chlorophenyl)(nitroso)amino]phenyl}ethanone;
 - {4-[(4-fluorophenyl)(nitroso)amino]phenyl}methanol;
 - (4-{nitroso[4-(trifluoromethoxy)phenyl]amino}phenyl)methanol;
 - N-{4-[[4-(hydroxymethyl)phenyl](nitroso)amino]phenyl}acetamide;
- 10 {4-[(3-chlorophenyl)(nitroso)amino]phenyl}methanol;
 - {4-[(3-methylphenyl)(nitroso)amino]phenyl}methanol;
 - 3-[(4-fluorophenyl)(nitroso)amino]benzoic acid.
- 24. Use according to Claim 22 or 23, for the preparation of a medicament that is useful for the treatment of and preventing diabetes and/or metabolic insulinresistance syndrome.
 - 25. Use according to Claim 22 or 23, for the preparation of a hypotriglyceridaemiant medicament.